as a light source, a porous plate 2 for generating substantially parallel rays, a liquid crystal display device (LCD) 3 for displaying an image recorded in digital form, a film case 51 accommodating photosensitive films 4, and a main body case 6 containing the back light unit 1, the porous plate 2, the LCD 3, and the film case 51.

The porous plate 2, the LCD 3, and the photosensitive films 4 are arranged in series along the direction in which the light from the back light unit 1 advances. At least the LCD 3 and the photosensitive films 4 are arranged in a non-contact state. If it is possible to emit light of sufficient intensity from the back light unit 1 for effecting exposure of the photosensitive film 4 in a short time with the display image transmitted through the LCD 3, there is no need to provide the porous plate 2.

The back light unit 1 serving as the light source irradiates the LCD 3 all over from behind with uniform light, and is a planar light source having a light emission surface substantially the same as the display screen of the LCD 3. It comprises a bar-like lamp 11 such as a cold-cathode tube, a light guide plate (not shown) for introducing the light emitted from the bar-like lamp 11 in a predetermined direction, a reflection sheet (not shown) for reflecting the light introduced to the light guide

member in a direction substantially perpendicular thereto, and a back light assembly having a diffusion sheet (not shown) for uniformalizing the light reflected by the reflection sheet, a prism sheet, etc.

There are no particular limitations regarding the back light unit 1 used in the present invention. It may be of any type as long as it is a planar light source which uniformly diffuses light emitted from a cold cathode tube 11 by using a back light assembly composed of a light guide plate, a reflection sheet, a diffusion sheet, a prism sheet, etc. It is possible to use a well-known LCD back light unit. In the example shown, the size of the light emitting surface may be the same as the size of the display screen of the LCD 3 or the photosensitive surface of the photosensitive film 4. However, this should not be construed restrictively. It may be somewhat larger than the size of the display screen of the LCD 3 or the photosensitive surface of the photosensitive film 4.

As long as it is a planar light source capable of emitting light of a desired intensity, the back light unit 1 used in the present invention may also comprise an LED array light source, a light source using an organic or inorganic EL panel or the like.

As needed, the porous plate 2 used in the present

invention is arranged between the back light unit 1 and the LCD 3, and converts the light from the back light unit 1 into parallel rays. It is a substantially parallel rays generating element for making, as much as possible, the light impinging upon the LCD 3 parallel rays, and is a rectangular plate of a predetermined thickness having a large number of through-holes 21 of a predetermined size arranged at a predetermined pitch.

There are no particular limitations regarding the substantially parallel rays generating element used in the present invention as long as it is endowed with the same function. Thus, instead of the porous plate 2, it is also possible to use a square lattice shown in Fig. 6B, a hexagonal lattice shown in Fig. 6C or the like. However, in view of the ease with which it can be produced, it is desirable to use a porous plate.

Further, in the present invention, the distance between the porous plate 2 and the LCD 3 is set at preferably 0.05 to 10 mm, and more preferably, 0.1 mm to 5 mm. This measure is taken for the purpose of preventing the pattern of the through-holes 21 of the substantially parallel rays generating element, e.g., the porous plate 2, from appearing in the form of a "shadow" due to the diffused light. The above setting of the distance is made